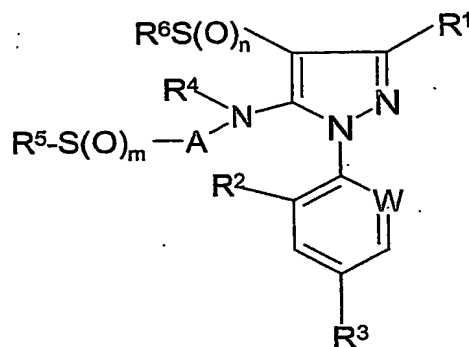


## CLAIMS

1. A method of controlling parasites in or on an animal comprising administering to the animal a parasitically effective amount of a 5-substituted-alkylaminopyrazole derivative of formula (I):



(I)

wherein:

R¹ is CN;

W is C-halogen, C-CH₃ or N;

R² is hydrogen, halogen or CH₃;

R³ is (C₁-C₃)-haloalkyl, (C₁-C₃)-haloalkoxy or S(O)ₚ-(C₁-C₃)-haloalkyl;

R⁴ is hydrogen, (C₂-C₆)-alkenyl, (C₂-C₆)-haloalkenyl, (C₂-C₆)-alkynyl, (C₂-C₆)-haloalkynyl, (C₃-C₇)-cycloalkyl, CO-(CH₂)ₑ-R⁷, COR⁸, CO-(CH₂)ₑ-R⁹, -CO-(C₁-C₄)-alkyl-(C₁-C₆)-alkoxy, -CO₂-(CH₂)ₑ-R⁷, CO₂R⁸, -CO₂-(CH₂)ₑ-R⁹, -CO₂-(C₃-C₇)-cycloalkyl, -CO₂-(C₁-C₄)-alkyl-(C₃-C₇)-cycloalkyl, -CO₂-(C₃-C₆)-alkenyl, -CO₂-(C₃-C₆)-alkynyl, CONR¹⁰R¹¹, -CH₂R⁷, -CH₂R⁹, OR⁷, OR⁸ or OR⁹; or (C₁-C₆)-alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₆)-alkoxy, (C₁-C₆)-haloalkoxy, (C₃-C₇)-cycloalkyl, S(O)ₚR⁸, CO₂-(C₁-C₆)-alkyl, -O(C=O)-(C₁-C₆)-alkyl, NR¹⁰COR¹², NR¹⁰R¹¹, CONR¹⁰R¹¹, SO₂NR¹⁰R¹¹, OH, CN, NO₂, OR⁷, NR¹⁰SO₂R⁸, COR⁸ and OR⁹;

A is (C₁-C₁₂)-alkylene, or (C₁-C₁₂)-haloalkylene in which 2, 3 or 4 adjacent carbon atoms optionally form part of a (C₃-C₈)-cycloalkyl ring which is unsubstituted or substituted by one or more radicals selected from the group consisting of (C₁-C₆)-alkyl and halogen; or is (C₁-C₁₂)-alkylene or (C₁-C₁₂)-haloalkylene in which last

two mentioned groups a methylene moiety is replaced by a group selected from  $-C(=O)-$ ,  $-C(=NH)-$ ,  $-O-$ ,  $-S-$  and  $-NR^{15}-$ , with the proviso that the replacing group is not bonded to the adjacent  $S(O)_m$  group or N atom; or is  $(C_2-C_{12})$ -alkenylene or  $(C_2-C_{12})$ -haloalkenylene;

$R^5$  is H,  $(C_3-C_6)$ -alkenyl,  $(C_3-C_6)$ -haloalkenyl,  $(C_3-C_6)$ -alkynyl,  $(C_3-C_6)$ -haloalkynyl,  $(C_3-C_7)$ -cycloalkyl,  $-(CH_2)_qR^7$ ,  $-(CH_2)_qR^9$  or  $NR^{10}R^{11}$  provided that for the last mentioned radical m is 2; or is  $(C_1-C_6)$ -alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkoxy,  $(C_1-C_6)$ -haloalkoxy,  $(C_3-C_6)$ -alkenyloxy,  $(C_3-C_6)$ -haloalkenyloxy,  $(C_3-C_6)$ -alkynyloxy,  $(C_3-C_6)$ -haloalkynyloxy,  $(C_3-C_7)$ -cycloalkyl,  $S(O)_pR^8$ , CN,  $NO_2$ , OH,  $COR^{10}$ ,  $NR^{10}COR^{12}$ ,  $NR^{10}SO_2R^8$ ,  $CONR^{10}R^{11}$ ,  $NR^{10}R^{11}$ ,  $S(O)_pR^7$ ,  $S(O)_pR^9$ ,  $OR^7$ ,  $OR^9$  and  $CO_2R^{10}$ ; or when A is  $(C_1-C_{12})$ -alkylene or  $(C_1-C_{12})$ -haloalkylene and  $R^5$  is  $(C_1-C_6)$ -alkyl unsubstituted or substituted by one or more halogen radicals, one or more of the carbon atoms of  $R^5$  may, together with  $S(O)_m$  and one or more of the carbon atoms of A, form a 5- or 6-membered ring;

$R^6$  is  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_2-C_6)$ -alkenyl,  $(C_2-C_6)$ -haloalkenyl,  $(C_2-C_6)$ -alkynyl or  $(C_2-C_6)$ -haloalkynyl;

$R^7$  is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_1-C_6)$ -alkoxy,  $(C_1-C_6)$ -haloalkoxy, CN,  $NO_2$ ,  $S(O)_pR^8$ ,  $COR^{11}$ ,  $COR^{13}$ ,  $CONR^{10}R^{11}$ ,  $SO_2NR^{10}R^{11}$ ,  $NR^{10}R^{11}$ , OH,  $SO_3H$  and  $(C_1-C_6)$ -alkylideneimino;

$R^8$  is  $(C_1-C_6)$ -alkyl or  $(C_1-C_6)$ -haloalkyl;

$R^9$  is heterocyclyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_4)$ -alkyl,  $(C_1-C_4)$ -haloalkyl,  $(C_1-C_4)$ -alkoxy,  $(C_1-C_4)$ -haloalkoxy,  $NO_2$ , CN,  $CO_2(C_1-C_6)$ -alkyl,  $S(O)_pR^8$ , OH and oxo;

$R^{10}$  and  $R^{12}$  are each independently H,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_3-C_6)$ -alkenyl,  $(C_3-C_6)$ -haloalkenyl,  $(C_3-C_6)$ -alkynyl,  $(C_3-C_6)$ -haloalkynyl,  $(C_3-C_6)$ -cycloalkyl,  $-(C_1-C_6)$ -alkyl- $(C_3-C_6)$ -cycloalkyl,  $-(CH_2)_qR^{13}$  or  $-(CH_2)_qR^9$ ; or

$R^{10}$  and  $R^{11}$  and/or  $R^{10}$  and  $R^{12}$  each together with the respective attached N atom form a five- or six-membered saturated ring which optionally contains an additional hetero atom in the ring which is selected from O, S and N, the ring being

unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl and (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl;

R<sup>11</sup> and R<sup>14</sup> are each independently H, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl, (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl or -(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl;

R<sup>13</sup> is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, (C<sub>1</sub>-C<sub>6</sub>)-haloalkoxy, CN, NO<sub>2</sub>, S(O)<sub>p</sub>R<sup>8</sup> and NR<sup>11</sup>R<sup>14</sup>;

R<sup>15</sup> is R<sup>11</sup> or -(CH<sub>2</sub>)<sub>q</sub>R<sup>13</sup>;

m, n and p are each independently zero, one or two;

q is zero or one; and

each heterocyclyl in the above-mentioned radicals is independently a heterocyclic radical having 3 to 7 ring atoms and 1, 2 or 3 hetero atoms in the ring selected from the group consisting of N, O and S;

or a pesticidally acceptable salt thereof.

2. The method as claimed in claim 1, wherein the symbols and indices in formula (I) have the following meanings:

R<sup>1</sup> is CN;

W is C-Cl;

R<sup>2</sup> is chlorine;

R<sup>3</sup> is CF<sub>3</sub> or OCF<sub>3</sub>;

R<sup>4</sup> is hydrogen, CO<sub>2</sub>-(C<sub>1</sub>-C<sub>3</sub>)-alkyl, or (C<sub>1</sub>-C<sub>6</sub>)-alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen and (C<sub>1</sub>-C<sub>3</sub>)-alkoxy;

A is (C<sub>1</sub>-C<sub>4</sub>)-alkylene;

R<sup>5</sup> is (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl, -(CH<sub>2</sub>)<sub>q</sub>R<sup>7</sup>, (C<sub>1</sub>-C<sub>6</sub>)-alkyl or (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl; or when R<sup>5</sup> is (C<sub>1</sub>-C<sub>6</sub>)-alkyl, one or more of the carbon atoms of the R<sup>5</sup> group may, together with the S(O)<sub>m</sub> group and one or more of the carbon atoms of A, form a 5- or 6-membered ring;

R<sup>6</sup> is CF<sub>3</sub>, CF<sub>2</sub>Cl, CFCl<sub>2</sub>, CBrF<sub>2</sub> or CHF<sub>2</sub>;

R<sup>7</sup> is phenyl;

m and n are each independently zero, one or two; and

q is zero or one.

3. The method as claimed in claim 1, wherein the symbols and indices in formula (I) have the following meanings:

R<sup>1</sup> is CN;

W is C-Cl;

R<sup>2</sup> is Cl;

R<sup>3</sup> is CF<sub>3</sub> or OCF<sub>3</sub>;

R<sup>4</sup> is hydrogen, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, COR<sup>9</sup> (where R<sup>9</sup> is tetrahydrofuryl), -COCH<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkoxy, -CO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, -CO<sub>2</sub>-(CH<sub>2</sub>)<sub>q</sub>-R<sup>7</sup>, OR<sup>7</sup>, OR<sup>8</sup> or OR<sup>9</sup> (where R<sup>9</sup> is pyridyl); or (C<sub>1</sub>-C<sub>6</sub>)-alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl and S(O)<sub>p</sub>R<sup>8</sup>;

A is (C<sub>1</sub>-C<sub>6</sub>)-alkylene in which 2, 3 or 4 adjacent carbon atoms optionally form part of a (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl ring;

R<sup>5</sup> is (C<sub>3</sub>-C<sub>6</sub>)-alkenyl, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, -(CH<sub>2</sub>)<sub>q</sub>R<sup>7</sup> or NR<sup>10</sup>R<sup>11</sup> provided that for the last mentioned radical X is SO<sub>2</sub>; or is (C<sub>1</sub>-C<sub>6</sub>)-alkyl or (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl;

R<sup>6</sup> is CF<sub>3</sub>, CF<sub>2</sub>Cl, CFC<sub>2</sub>Cl, CBrF<sub>2</sub>, CHF<sub>2</sub> or CH<sub>3</sub>;

R<sup>7</sup> is phenyl unsubstituted or substituted by one or more (C<sub>1</sub>-C<sub>6</sub>)-alkoxy groups;

R<sup>8</sup> is (C<sub>1</sub>-C<sub>6</sub>)-alkyl;

R<sup>10</sup> and R<sup>11</sup> are the same or different (C<sub>1</sub>-C<sub>6</sub>)-alkyl; or

R<sup>10</sup> and R<sup>11</sup> together with the attached N atom form a five- or six-membered saturated ring which optionally contains an additional hetero atom in the ring which is selected from O, S and N;

m and n are each independently zero, one or two; and

q is zero or one.

4. 5-Substituted-alkylaminopyrazole derivatives of formula (I) as in claim 1, or pesticidally acceptable salts thereof, wherein the symbols and indices in formula (I) have the following meanings:

R<sup>1</sup> is CN;

W is C-halogen or C-CH<sub>3</sub>;

$R^2$  is hydrogen, halogen or  $CH_3$ ;

$R^3$  is  $(C_1-C_3)$ -haloalkyl,  $(C_1-C_3)$ -haloalkoxy or  $S(O)_p$ -( $C_1-C_3$ )-haloalkyl;

$R^4$  is  $(C_2-C_6)$ -alkenyl,  $(C_2-C_6)$ -haloalkenyl,  $(C_2-C_6)$ -alkynyl,  $(C_2-C_6)$ -haloalkynyl,  $(C_3-C_7)$ -cycloalkyl,  $CO-(CH_2)_q-R^7$ ,  $CO_2R^8$ ,  $CO-(CH_2)_q-R^9$ ,  $-CO-(C_1-C_4)$ -alkyl- $(C_1-C_6)$ -alkoxy,  $-CO_2-(CH_2)_q-R^7$ ,  $-CO_2-(CH_2)_q-R^9$ ,  $-CO_2-(C_3-C_7)$ -cycloalkyl,  $-CO_2-(C_1-C_4)$ -alkyl- $(C_3-C_7)$ -cycloalkyl,  $-CO_2-(C_3-C_6)$ -alkenyl,  $-CO_2-(C_3-C_6)$ -alkynyl,  $CONR^{10}R^{11}$ ,  $-CH_2R^7$ ,  $-CH_2R^9$ ,  $OR^7$ ,  $OR^8$  or  $OR^9$ ; or  $(C_1-C_6)$ -alkyl which is substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkoxy,  $(C_1-C_6)$ -haloalkoxy,  $(C_3-C_7)$ -cycloalkyl,  $S(O)_pR^8$ ,  $CO_2-(C_1-C_6)$ -alkyl,  $-O(C=O)-(C_1-C_6)$ -alkyl,  $NR^{10}COR^{12}$ ,  $NR^{10}R^{11}$ ,  $CONR^{10}R^{11}$ ,  $SO_2NR^{10}R^{11}$ ,  $OH$ ,  $CN$ ,  $NO_2$ ,  $OR^7$ ,  $NR^{10}SO_2R^8$ ,  $COR^8$  and  $OR^9$ ;

A is  $(C_1-C_{12})$ -alkylene and  $(C_1-C_{12})$ -haloalkylene in which 2, 3 or 4 adjacent carbon atoms optionally form part of a  $(C_3-C_8)$ -cycloalkyl ring which is unsubstituted or substituted by one or more radicals selected from the group consisting of  $(C_1-C_6)$ -alkyl and halogen; or is  $(C_1-C_{12})$ -alkylene or  $(C_1-C_{12})$ -haloalkylene in which last two mentioned groups a methylene moiety is replaced by a group selected from  $-C(=O)-$ ,  $-C(=NH)-$ ,  $-O-$ ,  $-S-$  and  $-NR^{15}-$ , with the proviso that the replacing group is not bonded to the adjacent  $S(O)_m$  group or N atom; or is  $(C_2-C_{12})$ -alkenylene or  $(C_2-C_{12})$ -haloalkenylene;

$R^5$  is H,  $(C_3-C_6)$ -alkenyl,  $(C_3-C_6)$ -haloalkenyl,  $(C_3-C_6)$ -alkynyl,  $(C_3-C_6)$ -haloalkynyl,  $(C_3-C_7)$ -cycloalkyl,  $-(CH_2)_qR^7$ ,  $-(CH_2)_qR^9$  or  $NR^{10}R^{11}$  provided that for the last mentioned radical m is 2; or is  $(C_1-C_6)$ -alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkoxy,  $(C_1-C_6)$ -haloalkoxy,  $(C_3-C_6)$ -alkenyloxy,  $(C_3-C_6)$ -haloalkenyloxy,  $(C_3-C_6)$ -alkynyloxy,  $(C_3-C_6)$ -haloalkynyloxy,  $(C_3-C_7)$ -cycloalkyl,  $S(O)_pR^8$ ,  $CN$ ,  $NO_2$ ,  $OH$ ,  $COR^{10}$ ,  $NR^{10}COR^{12}$ ,  $NR^{10}SO_2R^8$ ,  $CONR^{10}R^{11}$ ,  $NR^{10}R^{11}$ ,  $S(O)_pR^7$ ,  $S(O)_pR^9$ ,  $OR^7$ ,  $OR^9$  and  $CO_2R^{10}$ ; or when A is  $(C_1-C_{12})$ -alkylene or  $(C_1-C_{12})$ -haloalkylene and  $R^5$  is  $(C_1-C_6)$ -alkyl unsubstituted or substituted by one or more halogen radicals, one or more of the carbon atoms of  $R^5$  may, together with  $S(O)_m$  and one or more of the carbon atoms of A, form a 5- or 6-membered ring;

$R^6$  is  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_2-C_6)$ -alkenyl,  $(C_2-C_6)$ -haloalkenyl,  $(C_2-C_6)$ -alkynyl or  $(C_2-C_6)$ -haloalkynyl;

$R^7$  is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_1-C_6)$ -alkoxy,  $(C_1-C_6)$ -haloalkoxy, CN,  $NO_2$ ,  $S(O)_pR^8$ ,  $COR^{11}$ ,  $COR^{13}$ ,  $CONR^{10}R^{11}$ ,  $SO_2NR^{10}R^{11}$ ,  $NR^{10}R^{11}$ , OH,  $SO_3H$  and  $(C_1-C_6)$ -alkylideneimino;

$R^8$  is  $(C_1-C_6)$ -alkyl or  $(C_1-C_6)$ -haloalkyl;

$R^9$  is heterocyclyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_4)$ -alkyl,  $(C_1-C_4)$ -haloalkyl,  $(C_1-C_4)$ -alkoxy,  $(C_1-C_4)$ -haloalkoxy,  $NO_2$ , CN,  $CO_2(C_1-C_6)$ -alkyl,  $S(O)_pR^8$ , OH and oxo;

$R^{10}$  and  $R^{12}$  are each independently H,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_3-C_6)$ -alkenyl,  $(C_3-C_6)$ -haloalkenyl,  $(C_3-C_6)$ -alkynyl,  $(C_3-C_6)$ -haloalkynyl,  $(C_3-C_6)$ -cycloalkyl,  $-(C_1-C_6)$ -alkyl- $(C_3-C_6)$ -cycloalkyl,  $-(CH_2)_qR^{13}$  or  $-(CH_2)_qR^9$ ; or

$R^{10}$  and  $R^{11}$  and/or  $R^{10}$  and  $R^{12}$  each together with the respective attached N atom form a five- or six-membered saturated ring which optionally contains an additional hetero atom in the ring which is selected from O, S and N, the ring being unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkyl and  $(C_1-C_6)$ -haloalkyl;

$R^{11}$  and  $R^{14}$  are each independently H,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_3-C_6)$ -cycloalkyl or  $-(C_1-C_6)$ -alkyl- $(C_3-C_6)$ -cycloalkyl;

$R^{13}$  is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_1-C_6)$ -alkoxy,  $(C_1-C_6)$ -haloalkoxy, CN,  $NO_2$ ,  $S(O)_pR^8$  and  $NR^{11}R^{14}$ ;

$R^{15}$  is  $R^{11}$  or  $-(CH_2)_qR^{13}$ ;

m, n and p are each independently zero, one or two;

q is zero or one; and

each heterocyclyl in the above-mentioned radicals is independently a heterocyclic radical having 3 to 7 ring atoms and 1, 2 or 3 hetero atoms in the ring selected from the group consisting of N, O and S.

5. 5-Substituted-alkylaminopyrazole derivatives of formula (I) as in claim 1, or pesticidally acceptable salts thereof, wherein:

$R^1$  is CN;

W is C-halogen or C- $CH_3$ ;

$R^2$  is hydrogen, halogen or  $CH_3$ ;

$R^3$  is  $(C_1-C_3)$ -haloalkyl,  $(C_1-C_3)$ -haloalkoxy or  $S(O)_p$ -( $C_1-C_3$ )-haloalkyl;

$R^4$  is hydrogen,  $(C_1-C_6)$ -alkyl or  $COR^8$ ;

A is  $(C_1-C_{12})$ -alkylene and  $(C_1-C_{12})$ -haloalkylene in which 2, 3 or 4 adjacent carbon atoms optionally form part of a  $(C_3-C_8)$ -cycloalkyl ring which is unsubstituted or substituted by one or more radicals selected from the group consisting of  $(C_1-C_6)$ -alkyl and halogen; or is  $(C_1-C_{12})$ -alkylene or  $(C_1-C_{12})$ -haloalkylene in which last two mentioned groups a methylene moiety is replaced by a group selected from  $-C(=O)-$ ,  $-C(=NH)-$ ,  $-O-$ ,  $-S-$  and  $-NR^{15}-$ , with the proviso that the replacing group is not bonded to the adjacent  $S(O)_m$  group or N atom; or is  $(C_2-C_{12})$ -alkenylene or  $(C_2-C_{12})$ -haloalkenylene;

$R^5$  is H,  $(C_3-C_6)$ -alkenyl,  $(C_3-C_6)$ -haloalkenyl,  $(C_3-C_6)$ -alkynyl,  $(C_3-C_6)$ -haloalkynyl,  $(C_3-C_7)$ -cycloalkyl,  $-(CH_2)_qR^7$ ,  $-(CH_2)_qR^9$  or  $NR^{10}R^{11}$  provided that for the last mentioned radical  $S(O)_m$  is  $SO_2$ ; or is  $(C_1-C_6)$ -alkyl substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkoxy,  $(C_1-C_6)$ -haloalkoxy,  $(C_3-C_6)$ -alkenyloxy,  $(C_3-C_6)$ -haloalkenyloxy,  $(C_3-C_6)$ -alkynyloxy,  $(C_3-C_6)$ -haloalkynyloxy,  $(C_3-C_7)$ -cycloalkyl,  $S(O)_pR^8$ , CN,  $NO_2$ , OH,  $COR^{10}$ ,  $NR^{10}COR^{12}$ ,  $NR^{10}SO_2R^8$ ,  $CONR^{10}R^{11}$ ,  $NR^{10}R^{11}$ ,  $S(O)_pR^7$ ,  $S(O)_pR^9$ ,  $OR^7$ ,  $OR^9$  and  $CO_2R^{10}$ ; or when A is  $(C_1-C_{12})$ -alkylene or  $(C_1-C_{12})$ -haloalkylene and  $R^5$  is  $(C_1-C_6)$ -alkyl substituted by one or more halogen radicals, one or more of the carbon atoms of  $R^5$  may, together with  $S(O)_m$  and one or more of the carbon atoms of A, form a 5- or 6-membered ring;

$R^6$  is  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_2-C_6)$ -alkenyl,  $(C_2-C_6)$ -haloalkenyl,  $(C_2-C_6)$ -alkynyl or  $(C_2-C_6)$ -haloalkynyl;

$R^7$  is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -haloalkyl,  $(C_1-C_6)$ -alkoxy,  $(C_1-C_6)$ -haloalkoxy, CN,  $NO_2$ ,  $S(O)_pR^8$ ,  $COR^{11}$ ,  $COR^{13}$ ,  $CONR^{10}R^{11}$ ,  $SO_2NR^{10}R^{11}$ ,  $NR^{10}R^{11}$ , OH,  $SO_3H$  and  $(C_1-C_6)$ -alkylideneimino;

$R^8$  is  $(C_1-C_6)$ -alkyl or  $(C_1-C_6)$ -haloalkyl;

$R^9$  is heterocyclyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,  $(C_1-C_4)$ -alkyl,  $(C_1-C_4)$ -haloalkyl,  $(C_1-C_4)$ -alkoxy,  $(C_1-C_4)$ -haloalkoxy,  $NO_2$ , CN,  $CO_2(C_1-C_6)$ -alkyl,  $S(O)_pR^8$ , OH and oxo;

$R^{10}$  and  $R^{12}$  are each independently H, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl, (C<sub>3</sub>-C<sub>6</sub>)-alkenyl, (C<sub>3</sub>-C<sub>6</sub>)-haloalkenyl, (C<sub>3</sub>-C<sub>6</sub>)-alkynyl, (C<sub>3</sub>-C<sub>6</sub>)-haloalkynyl, (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl, -(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl,  $-(CH_2)_qR^{13}$  or  $-(CH_2)_qR^9$ ; or

$R^{10}$  and  $R^{11}$  and/or  $R^{10}$  and  $R^{12}$  each together with the respective attached N atom form a five- or six-membered saturated ring which optionally contains an additional hetero atom in the ring which is selected from O, S and N, the ring being unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl and (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl;

$R^{11}$  and  $R^{14}$  are each independently H, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl, (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl or -(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl;

$R^{13}$  is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, (C<sub>1</sub>-C<sub>6</sub>)-haloalkoxy, CN, NO<sub>2</sub>, S(O)<sub>p</sub>R<sup>8</sup> and NR<sup>11</sup>R<sup>14</sup>;

$R^{15}$  is  $R^{11}$  or  $-(CH_2)_qR^{13}$ ;

m, n and p are each independently zero, one or two;

q is zero or one; and

each heterocyclyl in the above-mentioned radicals is independently a heterocyclic radical having 3 to 7 ring atoms and 1, 2 or 3 hetero atoms in the ring selected from the group consisting of N, O and S.

6. 5-Substituted-alkylaminopyrazole derivatives of formula (I), or pesticidally acceptable salts thereof, wherein the symbols and indices in formula (I) have the following meanings:

$R^1$  is CN;  $R^2$  is chlorine;  $R^3$  is CF<sub>3</sub> or OCF<sub>3</sub>; W is C-Cl;  $R^4$  is hydrogen or (C<sub>1</sub>-C<sub>6</sub>)-alkyl;  $R^5$  is (C<sub>1</sub>-C<sub>6</sub>)-alkyl;  $R^6$  is CF<sub>3</sub>; A is (C<sub>2</sub>-C<sub>3</sub>)-alkylene and m and n are each independently zero, one or two.

7. The use of compounds of formula (I) and pesticidally acceptable salts thereof according to one or more of claims 1 to 6 for the control of parasites in and on animals.

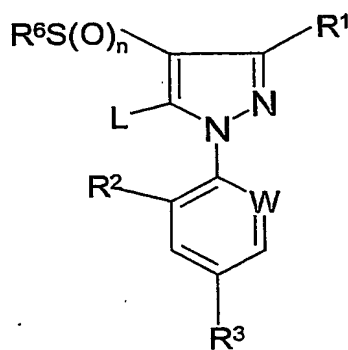


8. The use of compounds of formula (I) and pesticidally acceptable salts thereof according to one or more of claims 1 to 6 for preparing a veterinary medicament.

9. A pesticidal composition comprising a compound of formula (I) or a pesticidally acceptable salt thereof as defined in any one of claims 1 to 6, in association with a pesticidally acceptable diluent or carrier and/or surface active agent.

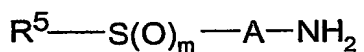
10. A process for the preparation of a compound of formula (I) or a salt thereof as defined in one or more of claims 1 to 6, which process comprises:

a) where  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^6$ , W, A, m and n are as defined in claim 1,  $R^4$  and  $R^5$  are as defined in claim 1 with the exclusion of hydrogen, and  $R^4$  is H, reacting a compound of formula (II):



(II)

wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^6$ , W and n are as defined in claim 1, and L is a leaving group, with a compound of formula (III):

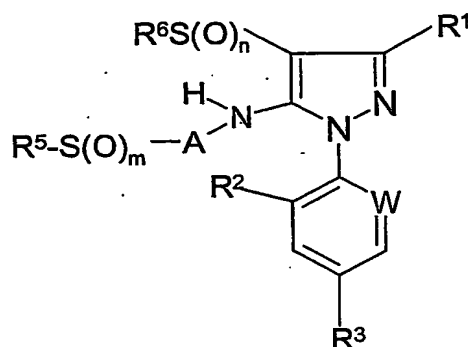


(III)

wherein m and A are as defined in claim 1 and  $R^5$  is as defined in claim 1 with the exclusion of hydrogen; or

b) where  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^6$ , W, A, m and n are as defined in claim 1 and  $R^4$  is as defined in claim 1 with the exclusion of hydrogen,  $OR^7$ ,  $OR^8$  and  $OR^9$ , and  $R^5$  is as defined in claim 1 with the exclusion of H, reacting a compound of formula (IV):

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(IV)

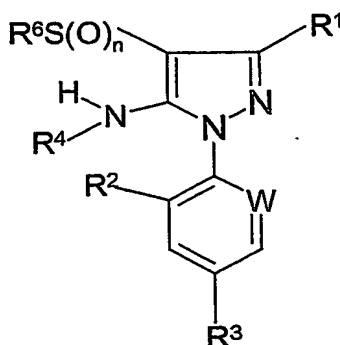
wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^6$ ,  $W$ ,  $A$ ,  $m$  and  $n$  are as defined in claim 1 and  $R^5$  is as defined in claim 1 with the exclusion of hydrogen, with a compound of formula (V):



(V)

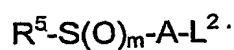
wherein  $R^4$  is as defined in claim 1 with the exclusion of hydrogen,  $OR^7$ ,  $OR^8$  and  $OR^9$ , and  $L^1$  is a leaving group; or

c) where  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^6$ ,  $W$ ,  $A$ ,  $m$  and  $n$  are as defined in claim 1 and  $R^5$  is as defined in claim 1 with the exclusion of hydrogen, reacting a compound of formula (VI):



(VI)

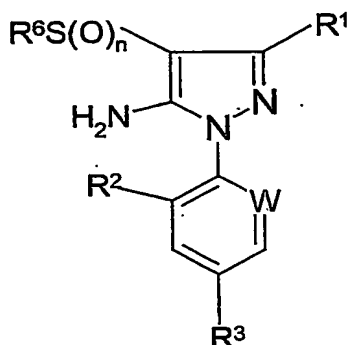
wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^6$ ,  $W$  and  $n$  are as defined in claim 1, with a compound of formula (VII):



(VII)

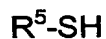
wherein  $m$  and  $A$  are as defined in claim 1,  $R^5$  is as defined in claim 1 with the exclusion of hydrogen and  $L^2$  is a leaving group;

d) where  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^6$ ,  $W$  and  $n$  are as defined in claim 1,  $R^5$  is as defined in claim 1 with the exclusion of hydrogen,  $R^4$  is hydrogen;  $A$  is  $-\text{CH}_2-$  and  $m$  is zero, reacting a compound of formula (VIII):



(VIII)

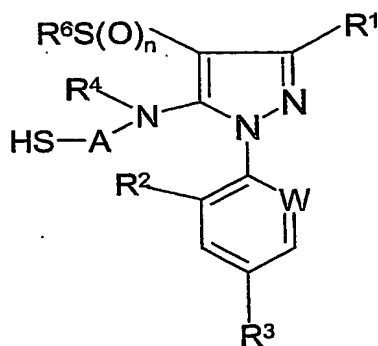
wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^6$ ,  $W$  and  $n$  are as defined in claim 1, with a mixture of formaldehyde and a compound of formula (IX):



(IX)

wherein  $R^5$  is as defined in claim 1 with the exclusion of hydrogen; or

e) where  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^6$ ,  $A$ ,  $W$  and  $n$  are as defined in claim 1,  $R^5$  is as defined in claim 1 with the exclusion of hydrogen, and  $m$  is zero, reacting a compound of formula (X):



(X)

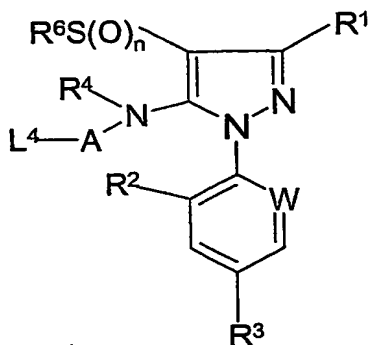
wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $A$ ,  $W$  and  $n$  are as defined in claim 1, with a compound of formula (XI):



(XI)

wherein  $R^5$  is as defined in claim 1 with the exclusion of hydrogen, and  $L^3$  is a leaving group; or

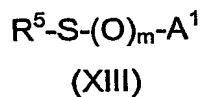
f) where  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ , A, W and n are as defined in claim 1, and m is zero, reacting a compound of formula (XII):



(XII)

wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ , A, W and n are as defined in claim 1 and  $L^4$  is a leaving group, with a compound of formula (IX) as defined above; or

g) where  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^6$ , W, and n are as defined in claim 1,  $R^5$  is as defined in claim 1 with the exclusion of hydrogen, and A is  $(C_2-C_{12})$ -alkylene of which a two carbon chain links the  $R^5-S(O)_m$ - and  $-NR^4$ - groups, reacting a compound of formula (VI) above wherein  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^6$ , W and n are as defined in claim 1, with a compound of formula (XIII):



(XIII)

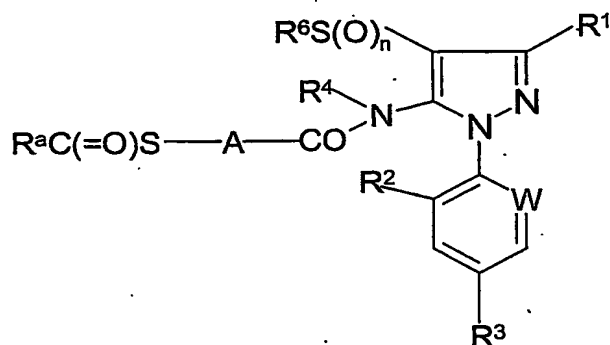
wherein  $R^5$  is as defined in claim 1, and  $A^1$  is a  $(C_2-C_{12})$ -alkenyl group in which the double bond is adjacent to the  $R^5-S(O)_m$  group; or

h) where  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^6$ , A, W, and n are as defined in claim 1,  $R^5$  is hydrogen, and m is zero, reacting the corresponding compound of formula (XII) as defined above, with a compound of formula (XIV):



(XIV)

wherein  $R^a$  is  $(C_1-C_6)$ -alkyl, to give a compound of formula (XV):



(XV)

wherein the various symbols are as defined above, followed by hydrolysis of the compound of formula (XV) to give the corresponding compound of formula (I) in which  $R^5$  is H; or

- i) where  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $W$  and  $A$  are as defined in claim 1, and  $m$  and/or  $n$  is 1 or 2, oxidising a corresponding compound in which  $m$  and/or  $n$  is 0 or 1; and
- j) if desired, converting a resulting compound of formula (I) into a pesticidally acceptable salt thereof.